COURSE DESCRIPTIONS

Faculty	Science and Information Technology				
Department	Computer Science			**NQF level**	6
Course Title	System Analysis and Design	**Code**	503381	**Prerequisite**	
Credit Hours	3	**Theory**	2	**Practical**	1
Course Leader	Dr. Azmi Halasa	**email**	halasa@jadara.edu.jo		
Lecturers	Dr. Azmi Halasa	**Web**	https://sites.google.com/site/azmihalasa		
Lecture time	14:30-16:00 Mon-Wed	**Classroom**	D311		
Semester	Second	**Production**		**Updated**	2021-2022
Awards	Bachelor Degree			**Attendance**	Fulltime

Short Description
This course introduces established and evolving methodologies for the analysis, design, and development of an information system. Emphasis is placed on system characteristics, managing projects, prototyping, CASE/OOM tools, and system development life cycle phases. Upon completion, students should be able to analyze a problem and design appropriate solution using a combination of tools and techniques.
Course Objectives
Upon completion of this course, students should be able to: Understand how computer does work, and how operating system performs a resources management to allow the correct work of the system

Learning Outcomes
A. Knowledge - Theoretical Understanding
a1: define and describe the phases of the system development life cycle (K1)
B. Knowledge - Practical Application
a2: Develop system analysis diagrams and decision tables (K5)
C. Skills - Generic Problem Solving and Analytical Skills
b1: Estimate and Perform feasibility study (S2)
D. Skills - Communication, ICT, and Numeracy
E. Competence: Autonomy, Responsibility, and Context
Teaching and Learning Methods
• Generate debate and dialogue in the class meeting

• Distance Learning
Assessment Methods
By quizzes, home works and exams

Course Content		
Weeks	**Topics**	**Chapter in Text**
1,2	Systems, Roles, and Development Methodologies	Chapter 1
3,4	Understanding and Modeling Organizational Systems	Chapter 2
5	Project Management	Chapter 3
6	Information Gathering: Interactive Methods	Chapter 4
7	Information Gathering: Unobtrusive Methods	Chapter 5
8	Agile Modeling and Prototyping	Chapter 6 + Mid Exam
9	Using Data Flow Diagrams	Chapter 7
10,11	Analyzing Systems Using Data Dictionaries Process Specifications and Structured Decisions	Chapter 8 Chapter 9
12	Object-Oriented Systems Analysis and Design Using UML	Chapter 10
13	Designing Effective Output and Input	Chapter 11+12
14	**Final Exam**	

Infrastructure	
Textbook	**System Analysis and Design. Kenneth E. Kendall, Julie E Kendall** Pearson**. 2016**
References	**ISBN: 0-273-78710-1**
Required reading	
Electronic materials	**Available on : eLearning Jadara University**
Other	

Assessment Method	**Grade**	**a1**	**a2**	**b1**
First (Midterm)	30	15	15	

Second (if applicable)					
Final Exam		50	20	20	10
Coursework		20			
Coursework assessment methods	Assignments				
	Case study				
	Discussion and interaction				
	Group work activities				
	Lab tests and assignments				
	Presentations				
	Quizzes	15	5	5	10
Total		100	40	40	20

Plagiarism
Plagiarism is claiming that someone else's work is your own. The department has a strict policy regarding plagiarism and, if plagiarism is indeed discovered, this policy will be applied. Note that punishments apply also to anyone assisting another to commit plagiarism (for example by knowingly allowing someone to copy your code). Plagiarism is different from group work in which a number of individuals share ideas on how to carry out the coursework. You are strongly encouraged to work in small groups, and you will certainly not be penalized for doing so. This means that you may work together on the program. What is important is that you have a full understanding of all aspects of the completed program. In order to allow proper assessment that this is indeed the case, you must adhere strictly to the course work requirements as outlined above and detailed in the coursework problem description. These requirements are in place to encourage individual understanding, facilitate individual assessment, and deter plagiarism.